## Abstract

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Lactones are prepared by catalytic carbonylation of oxiranes using a catalyst system comprising

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- a) at least one cobalt compound as component A and
- b) at least one metal compound of the formula (I) as component B,

## $MX_xR_{n-x}$

**(I)** 

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where

M is an alkaline earth metal or a metal of group 3, 4 or preferably 12 or 13 of the Periodic Table of the Elements,

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- R is hydrogen or a hydrocarbon radical which may be substituted on the carbon atoms other than the carbon atom bound to M,
- X is an anion,
- n is a number corresponding to the valence of M and
- x is in the range from 0 to n,

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with n and x being selected so that the compound is uncharged,

as catalyst.

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